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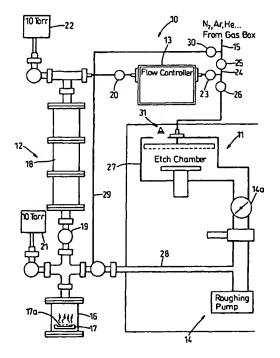
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(54) Method and apparatus for etching a workpiece

(57) An XeF_2 source 12 comprises a XeF_2 source chamber 16, which includes a tray or ampoule 17 for XeF_2 crystals 17a, a reservoir 18 via valve 19, a flow controller 13 fed by the reservoir 18 and a valve 20 be-

tween the reservoir 18 and the controller 13. Pressure sources 21 and 22 are provided respectively to maintain the reservoir 18 and the source chamber 16 at the sub-limination pressure of XeF_2 . The arrangement allows for a steady supply of XeF_2 to an etching chamber.





EUROPEAN SEARCH REPORT

Application Number EP 98 30 3196

Category	Citation of document with in-		Relevant	CLASSIFICATION OF THE
E	PATENT ABSTRACTS OF vol. 1998, no. 13, 30 November 1998 (19 & JP 10 209088 A (MI CORP), 7 August 1998	JAPAN 998-11-30) ITSUBISHI ELECTRIC	1-3,6,8	HO1J37/32
Α	* abstract * PATENT ABSTRACTS OF vol. 010, no. 325 (16 November 1986 (198	E-451), B6-11-06) EC CORP),	1,6	
				TECHNICAL FIELDS SEARCHED (int.Cl.6)
	The present search report has t	been drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	THE HAGUE	25 November 1999	25 November 1999 Schaub, G	
X:pa Y:pa do: A:tec O:no	CATEGORY OF CITED DOCUMENTS T: theory or principl E: earlier patent do affect the filling da articularly relevant if taken alone articularly relevant if combined with another D: document cited is cournent of the same category L: document cited is			ilished on, or

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 98 30 3196

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25-11-1999

	Patent document cited in search report			Publication date	Patent family member(s)	Publication date
	JP	10209088	A	07-08-1998	NONE	
	JP	61134019	A	21-06-1986	NONE	
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629						
O FORM POAS9						
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82